



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,869	08/25/2003	Kang-heuy Lee	1293.1837	1669

21171 7590 11/27/2007
STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

BODDIE, WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

2629

MAIL DATE	DELIVERY MODE
-----------	---------------

11/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/646,869

Applicant(s)

LEE, KANG-HEUY

Examiner

William L. Boddie

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-17,19-23 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-17,19-23 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In an amendment dated, October 26th, 2007, the Applicant amended claims 1-2, 4, 8, 10-11, 13-15, 19, 21-23, 25, 27 and cancelled claims 20, 24 and 26. Currently claims 1-6, 8-17, 19, 20-23 and 27 are pending.

Response to Arguments

2. Applicant's arguments filed October 26th, 2007 have been fully considered but they are not persuasive.

3. Specifically on page 10 of the fax, the Applicants argue that Chang teaches the control of an electronic device that is further coupled to a television. As such, the Applicants argue that Chang teaches away from their invention.

4. The Examiner must respectfully disagree. It should be first noted that the limitations which the Applicants argue Chang teaches away from are not present in the claims. All that is required is "an apparatus for controlling functions of an image processing apparatus", there is no requirement that the apparatus be a television.

Applicant's arguments with respect to claims 1, 13 and 21, on pages 11-12 of the fax, have been considered but are moot in view of the new ground(s) of rejection.

5. On page 13 of the fax, the Applicants argue that Bradley also teaches away from the invention, as it controls a television appliance which in turn controls a television. The Examiner must disagree again on the very same grounds as discussed above.

6. As such the rejections of claims 1-6, 8-17, 19, 20-23 and 27 are seen as proper and are thus maintained. Please note the updated rejections below to the pending claims that have been amended by the recent amendment.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama et al. (US 5,751,373) in view of Chang et al. (US 2003/0090515).

With respect to claim 1, Ohyama discloses, an apparatus for controlling functions of an image processing apparatus using a remote control (20-23 and 2 in fig. 1), the apparatus comprising:

a remote control signal receiver (13 in fig. 1) receiving a remote control signal output from the remote control (col. 5, lines 66-67);

a memory unit storing code information corresponding to the remote control signal and additional function information of the image processing apparatus (12 and 16-19 in fig. 1, col. 5, lines 61-65);

a controller controlling the additional function information stored in the memory unit to be displayed (11 in fig. 1, col. 5, lines 61-65) and controlling an additional function that is selected based on the displayed additional function information to be performed (col. 12, lines 61-67), if the remote control signal received via the remote control signal receiver is a signal for requesting the additional function information (23 in fig. 1; also see S1 and S2 in fig. 2A), and controls a function corresponding to a major function information to be performed if the remote control signal is the major function

information (col. 14, lines 43-49; discuss performing examples of major functions such as increasing/decreasing the volume/channel); and

a display unit (4 in fig. 1) displaying the additional function information controlled by the controller (clear from fig. 7, for example); and

wherein the major function information (129 or 131 in fig. 21, for example) is set based on at least one function which is frequently used in the image processing apparatus (the channel and volume control functions are inherently frequently used; applicant's own specification classifies these functions as frequently used; as Ohyama has included these in the major function category this limitation of the claim is disclosed by Ohyama).

Ohyama does not expressly disclose that the additional function information stored in the memory unit is categorized as such based on the frequency of use of the information, or that the additional function information stored in the memory unit is updated whenever the functions of the image processing apparatus are updated or a new function is added to the image processing apparatus.

Chang discloses, an apparatus (fig. 1) controlling functions of an image processing apparatus using a remote control (36 in fig. 1), the apparatus comprising:

a memory unit (176 in fig. 2) storing information corresponding to additional function information (middle of para. 26) of the image processing apparatus determined based on a frequency of use of the image processing apparatus (paras. 44, 47, 50; also note figs. 3-4);

the additional function information stored in the memory is updated whenever the functions of the image processing apparatus are updated or a new function is added to the image processing apparatus (beginning of the right hand column of page 5; also note para. 51), and

wherein the additional function information is set based on at least one function which is not frequently used in the image processing apparatus (paras. 44, 47, 50; also note figs. 3-4), to minimize a number of buttons on the remote control (an inherent byproduct of Chang's device).

In short, Chang adapts the user interface based on how frequently certain features are used. If a feature is rarely used by the user, that feature is removed from the memory which stores the features in the interface.

Ohyama and Chang are analogous art because they are both from the same field of endeavor namely, remote controls with access to on screen display controls.

At the time of the invention it would have been obvious to continually update the user interface of Ohyama based on each functions frequency of use, as taught by Chang.

The motivation for doing so would have been to make operation of the device more user friendly, by lessening the number of functions thereby lessening confusion and intimidation of the user (Chang; para. 5).

With respect to claim 13, Ohyama discloses, a method of controlling the functions of an image processing apparatus using a remote control, the method comprising:

parsing a received remote control signal received from the remote control (col. 15, lines 30-33) to determine whether the remote control signal is related to major function information or additional function information (S3 in fig. 2a);

displaying information for available additional functions on the image processing apparatus if the remote control signal contains a request for displaying information of additional functions (fig. 12 for example, also see S2 in fig. 2a);

performing a function (col.12, lines 61-67) of the image processing apparatus which corresponds to a selection signal in response to the selection signal being received from the remote control while the additional function information is displayed; and

and performing a function of the image processing apparatus which corresponds to the received remote control signal if the received remote control signal is a major function information (col. 14, lines 43-49; discuss performing examples of major functions such as increasing/decreasing the volume/channel), and

wherein the major function information (129 or 131 in fig. 21, for example) is set based on at least one function which is frequently used in the image processing apparatus (the channel and volume control functions are inherently frequently used; applicant's own specification classifies these functions as frequently used; as Ohyama has included these in the major function category this limitation of the claim is disclosed by Ohyama).

Ohyama does not expressly disclose that the additional function information stored in the memory unit is categorized as such based on the frequency of use of the

information, or that the additional function information stored in the memory unit is updated whenever the functions of the image processing apparatus are updated or a new function is added to the image processing apparatus.

Chang discloses, an apparatus (fig. 1) controlling functions of an image processing apparatus using a remote control (36 in fig. 1), the apparatus comprising:

a memory unit (176 in fig. 2) storing information corresponding to additional function information (middle of para. 26) of the image processing apparatus determined based on a frequency of use of the image processing apparatus (paras. 44, 47, 50; also note figs. 3-4);

updating the additional function information stored in the memory is updated whenever the functions of the image processing apparatus are updated or a new function is added to the image processing apparatus (beginning of the right hand column of page 5; also note para. 51), and

wherein the additional function information is set based on at least one function which is not frequently used in the image processing apparatus (paras. 44, 47, 50; also note figs. 3-4), to minimize a number of buttons on the remote control (an inherent byproduct of Chang's device).

In short, Chang adapts the user interface based on how frequently certain features are used. If a feature is rarely used by the user, that feature is removed from the memory which stores the features in the interface.

At the time of the invention it would have been obvious to continually update the user interface of Ohyama based on each functions frequency of use, as taught by Chang.

The motivation for doing so would have been to make operation of the device more user friendly, by lessening the number of functions thereby lessening confusion and intimidation of the user (Chang; para. 5).

With respect to claim 21, Ohyama discloses, an apparatus controlling functions of an image processing apparatus using a remote control, the apparatus comprising:

a memory unit (12, 13 and 16-19 in fig. 1) storing code information corresponding to a remote control signal from the remote control and additional function information of the image processing apparatus (col. 5, lines 61-65)

a controller (11 in fig. 1),

differentiating between major functions and additional functions in response to receiving a signal from the remote control (S1 in fig. 2a, also see col. 6, lines 49-53), and

causing additional function information to be displayed (fig. 15 for example), and

causing an additional function that is selected based on the displayed additional function information to be performed (col.12, lines 61-67), if a remote control signal received via the remote control is a signal for requesting the additional function information, and controls a function corresponding to a major function information to be performed if the remote control signal is the major

function information (col. 14, lines 43-49; discuss performing examples of major functions such as increasing/decreasing the volume/channel); and
a display unit (4 in fig. 1) displaying the additional function information controlled by the controller (col. 5, lines 61-67), and

wherein the major function information (129 or 131 in fig. 21, for example) is set based on at least one function which is frequently used in the image processing apparatus (the channel and volume control functions are inherently frequently used; applicant's own specification classifies these functions as frequently used; as Ohyama has included these in the major function category this limitation of the claim is disclosed by Ohyama).

Ohyama does not expressly disclose that the additional function information stored in the memory unit is categorized as such based on the frequency of use of the information, or that the additional function information stored in the memory unit is updated whenever the functions of the image processing apparatus are updated or a new function is added to the image processing apparatus.

Chang discloses, an apparatus (fig. 1) controlling functions of an image processing apparatus using a remote control (36 in fig. 1), the apparatus comprising:

a memory unit (176 in fig. 2) storing information corresponding to additional function information (middle of para. 26) of the image processing apparatus determined based on a frequency of use of the image processing apparatus (paras. 44, 47, 50; also note figs. 3-4);

the additional function information stored in the memory is updated whenever the functions of the image processing apparatus are updated or a new function is added to the image processing apparatus (beginning of the right hand column of page 5; also note para. 51), and

wherein the additional function information is set based on at least one function which is not frequently used in the image processing apparatus (paras. 44, 47, 50; also note figs. 3-4), to minimize a number of buttons on the remote control (an inherent byproduct of Chang's device).

In short, Chang adapts the user interface based on how frequently certain features are used. If a feature is rarely used by the user, that feature is removed from the memory which stores the features in the interface.

At the time of the invention it would have been obvious to continually update the user interface of Ohyama based on each functions frequency of use, as taught by Chang.

The motivation for doing so would have been to make operation of the device more user friendly, by lessening the number of functions thereby lessening confusion and intimidation of the user (Chang; para. 5).

9. Claims 2-6, 8-12, 14-17, 19 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama et al. (US 5,751,373) in view of Chang et al. (US 2003/0090515) and further in view of Song (US 5,691,778).

With respect to claim 2, Ohyama and Chang disclose, the apparatus of claim 1 (see above)

Ohyama further discloses, comprising an on-screen-display (OSD) processor (5 in fig. 1), controlled by the controller (fig. 1, col. 5, lines 61-67), generating OSD data corresponding to the additional function information and outputting the OSD data to the display unit (OSD RGB signal in fig. 1, col. 8, lines 39-42),

wherein the remote control signal is one of a selection signal (C1-C2 in fig. 20; col. 15, lines 14-16) or position information (A-H in fig. 20; col. 15, lines 3-8), and

wherein if the remote control signal is position information, the position information is input using directional keys (A-H in fig. 20) located around a selection button (vertical movement; col. 14, lines 50-57) and discloses a position of additional function information to be selected (col. 16, lines 5-9).

Neither Ohyama nor Chang expressly disclose wherein the additional function information includes numeric displays in place of numeric buttons to minimize the number of buttons.

Song discloses a physical remote control (fig. 6a) and graphic – remote control (fig. 6b) wherein additional function information (graphic remote control functions) includes numeric displays (fig. 6b) in place of numeric buttons (no numeric buttons present in fig. 6a) to minimize the number of buttons (the physical remote control will inherently have less buttons).

Song, Ohyama and Chang are analogous art because they are both from the same field of endeavor namely, remote controls with access to on screen display controls.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include numeric displays in the additional function information of Ohyama and Chang, as taught by Song.

The motivation for doing so would have been the well-known benefit of decreasing the required size of the physical remote, as well as lessening confusion and intimidation of the user.

With respect to claim 3, Ohyama, Song and Chang disclose, the apparatus of claim 2 (see above).

Ohyama further discloses, wherein the OSD data (OSD RGB signal in fig. 1, col. 8, lines 39-42) is processed by an existing OSD processing circuit (5 in fig. 1) in the image processing apparatus.

With respect to claim 4, Ohyama, Song and Chang disclose, the apparatus of claim 2 (see above).

Ohyama further discloses, wherein in response to the controller receiving a selection signal corresponding to desired additional function information (note step S9 in fig. 2C), the controller marks the desired additional function information selected among the displayed additional function information (note color changes and location of cursor that mark the additional information selected from fig. 7 to fig. 8).

With respect to claim 5, Ohyama, Song and Chang disclose, the apparatus of claim 4 (see above).

Ohyama further discloses, wherein the controller marks the desired additional function information selected by making the desired information darker or lighter than unselected additional function information (see figs. 6c and 7 for example).

With respect to claim 6, Ohyama, Song and Chang disclose, the apparatus of claim 4 (see above).

Ohyama further discloses, wherein the controller marks the desired additional function information selected by making the desired information a different color than unselected additional function information (see figs. 6c and 7 for example, a different shade, lighter or darker, is a different color).

With respect to claim 8, Ohyama, Song and Chang disclose, the apparatus of claim 2 (see above).

Ohyama further discloses, wherein the apparatus comprises an infrared ray receiving circuit (col. 15, lines 30-33).

With respect to claim 9, Ohyama, Song and Chang disclose, the apparatus of claim 8 (see above).

Ohyama further discloses, wherein the remote control comprises an infrared ray transmitting circuit (col. 15 lines 30-33, 101 and 207 in fig. 20).

With respect to claim 10, Ohyama, Song and Chang disclose, the apparatus of claim 2 (see above).

Ohyama further discloses, wherein the additional function information (for example fig. 14, hue, color, brightness) is modified without modifying the remote control (the display characteristics are altered without altering the remote, fig. 14).

With respect to claim 11, Ohyama, Song and Chang disclose, the apparatus of claim 2 (see above).

Ohyama further discloses, further comprising directional keys provided on the remote control (20, 21 in fig. 1), with which a user selects from the displayed additional function information (col. 7, lines 45-56).

With respect to claim 12, Ohyama, Song and Chang disclose, the apparatus of claim 11 (see above).

Ohyama further discloses, further comprising a selection button (22 in fig. 1) provided along with the directional keys.

With respect to claim 14, Ohyama and Chang disclose, the method of claim 13 (see above).

Ohyama further discloses, wherein the additional function information is displayed as OSD data (OSD RGB signal in fig. 1),

wherein the remote control signal is one of a selection signal (C1-C2 in fig. 20; col. 15, lines 14-16) or position information (A-H in fig. 20; col. 15, lines 3-8), and

wherein if the remote control signal is position information, the position information is input using directional keys (A-H in fig. 20) located around a selection button (vertical movement; col. 14, lines 50-57) and discloses a position of additional function information to be selected (col. 16, lines 5-9).

Neither Ohyama nor Chang expressly disclose wherein the additional function information includes numeric displays in place of numeric buttons to minimize the number of buttons.

Song discloses a physical remote control (fig. 6a) and graphic – remote control (fig. 6b) wherein additional function information (graphic remote control functions) includes numeric displays (fig. 6b) in place of numeric buttons (no numeric buttons present in fig. 6a) to minimize the number of buttons (the physical remote control will inherently have less buttons).

Song, Ohyama and Chang are analogous art because they are both from the same field of endeavor namely, remote controls with access to on screen display controls.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include numeric displays in the additional function information of Ohyama and Chang, as taught by Song.

The motivation for doing so would have been the well-known benefit of decreasing the required size of the physical remote, as well as lessening confusion and intimidation of the user.

With respect to claim 15, Ohyama, Song and Chang disclose, the method of claim 14 (see above).

Ohyama further discloses, wherein in response to receiving position information for selecting desired additional function information among the additional function information displayed (16 in fig. 1 for example), a position for the selected additional function information is marked on the displayed additional function information so that a user can perceive the selected additional function information (note the highlighting that occurs when the cursor is placed in a different position from fig. 7 to fig. 8).

With respect to claim 16, Ohyama, Song and Chang disclose, the method of claim 15 (see above).

Ohyama further discloses, wherein the selected additional function information is marked by making it darker or lighter than remaining displayed additional function information (see highlighting in figs. 7 and 8 for example).

With respect to claim 17, Ohyama, Song and Chang disclose, the method of claim 15 (see above).

Ohyama further discloses, wherein the selected additional function information is marked by making it a different color than remaining displayed additional function information (see figs. 6c and 7 for example, a different shade, lighter or darker, is a different color).

With respect to claim 19, Ohyama, Song and Chang disclose, the method of claim 14 (see above).

Ohyama further discloses, wherein the parsing of the received remote control signal comprises differentiating between major functions and the available additional functions (S1 in fig. 2A, also col. 6, lines 49-53).

With respect to claim 27, Ohyama and Chang disclose, the image processing system and apparatus of claim 21 (see above).

Ohyama further discloses, wherein the additional function information is displayed as OSD data (OSD RGB signal in fig. 1),

wherein the remote control signal is one of a selection signal (C1-C2 in fig. 20; col. 15, lines 14-16) or position information (A-H in fig. 20; col. 15, lines 3-8), and

wherein if the remote control signal is position information, the position information is input using directional keys (A-H in fig. 20) located around a selection button (vertical movement; col. 14, lines 50-57) and discloses a position of additional function information to be selected (col. 16, lines 5-9).

Neither Ohyama nor Chang expressly disclose wherein the additional function information includes numeric displays in place of numeric buttons to minimize the number of buttons.

Song discloses a physical remote control (fig. 6a) and graphic – remote control (fig. 6b) wherein additional function information (graphic remote control functions) includes numeric displays (fig. 6b) in place of numeric buttons (no numeric buttons present in fig. 6a) to minimize the number of buttons (the physical remote control will inherently have less buttons).

Song, Ohyama and Chang are analogous art because they are both from the same field of endeavor namely, remote controls with access to on screen display controls.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include numeric displays in the additional function information of Ohyama and Chang, as taught by Song.

The motivation for doing so would have been the well-known benefit of decreasing the required size of the physical remote, as well as lessening confusion and intimidation of the user.

10. Claims 22-23 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohyama et al. (US 5,751,373) in view of Chang et al. (US 2003/0090515) and Song (US 5,691,778) and further in view of Bradley et al. (US 6,574,798).

With respect to claims 22-23 and 25, Ohyama, Song and Chang disclose, the apparatus and method of claims 2, 14 and 27 (see above).

Neither Ohyama, Song nor Chang expressly disclose, wherein if a code corresponding to the remote control signal received by the remote control signal receiver is not stored in the memory unit, the controller ignores the remote control signal.

However, it should be noted that Ohyama, Song and Chang also do not disclose that the controller takes *any* action when it receives a signal that is not stored in the memory.

Bradley discloses, an audio/visual remote control system (fig. 1) wherein if a code corresponding to a remote control signal (wavy line in fig. 4) received by a remote control signal receiver (34 in fig. 4) is not stored in a memory unit (44 in fig. 4), the controller ignores the remote control signal (col. 13, lines 59-65).

Bradley, Ohyama, Song and Chang are analogous art because they are all from the same field of endeavor namely remote controls with access to on screen display controls.

At the time of the invention it would have been obvious to one of ordinary skill in the art to program the controller, of Ohyama, Song and Chang, to ignore remote control signals that it does not recognize as taught by Bradley.

The motivation for doing so would have been to not compromise the operation of the system when irrelevant signals are received (Bradley; col. 13, lines 59-60).

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Boddie whose telephone number is (571) 272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

wlb

11/19/07

AMR A. AWAD
SUPERVISORY PATENT EXAMINER
